AMENDMENTS TO THE CLAIMS:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

Claim 1 (Currently amended): A dielectric waveguide, comprising:

a first single crystal magnesium oxide block having a surface of the face (001), (100) or (010); and

a first copper oxide superconducting film ~~formed~~ disposed on said surface in a c-axis crystal orientation perpendicular to four or more faces of said block ~~the surface~~.

Claim 2 (Currently amended): The dielectric waveguide according to claim 1, further comprising:

a second single crystal magnesium oxide block having a surface of the face (001), (100) or (010); and

a second copper oxide superconducting film ~~formed~~ disposed on ~~the~~ said surface of said second single crystal magnesium oxide block in a c-axis crystal orientation perpendicular to ~~the~~ said surface,

wherein said first single crystal magnesium oxide block has the face (011), (101) or (110) to form a 45 degrees bent structure, and said second copper oxide superconducting film comes in contact with ~~the~~ said surface of said second single crystal magnesium oxide block.

Claim 3 (Currently amended): The dielectric waveguide according to claim 1, wherein said first copper oxide superconducting film is an oxide high-temperature superconductor composed of any one kind or more showing the crystal structure anisotropy of ~~Bin1Srn2Can3Cun4On5~~ $Bi_{n1}Sr_{n2}Ca_{n3}Cu_{n4}O_{n5}$ ($1.8 \leq n1 \leq 2.2$, $1.8 \leq n2 \leq 2.2$, $0.9 \leq n3 \leq 1.2$, $1.8 \leq n4 \leq 2.2$, $7.8 \leq n5 \leq 8.4$), ~~Pbk1Bik2Srk3Cak4Cuk5Ok6~~ $Pb_{k1}Bi_{k2}Sr_{k3}Ca_{k4}Cu_{k5}O_{k6}$ ($1.8 \leq k1+k2 \leq 2.2$, $0 \leq k1 \leq 0.6$, $1.8 \leq k3 \leq 2.2$, $1.8 \leq k4 \leq 2.2$, $1.8 \leq k5 \leq 2.2$, $9.5 \leq k6 \leq 10.8$), ~~Ym1Bam2Cum3Om4~~ $Y_{m1}Ba_{m2}Cu_{m3}O_{m4}$ ($0.5 \leq m1 \leq 1.2$, $1.8 \leq m2 \leq 2.2$, $2.5 \leq m3 \leq 3.5$, $6.6 \leq m4 \leq 7.0$), ~~REp1Bap2Cup3Op4~~ $RE_{p1}Ba_{p2}Cu_{p3}O_{p4}$ (RE: consisting of any of La, Nd, Sm, Eu, Gd, Dy, Ho, Er, Tm, Yb, Lu among rare-earth elements, $0.5 \leq m1 \leq 1.2$, $1.8 \leq m2 \leq 2.2$, $2.5 \leq m3 \leq 3.5$, $6.6 \leq m4 \leq 7.0$).

Claim 4 (Currently amended): The dielectric waveguide according to claim 1, further comprising: a protective film containing silver ~~formed~~ disposed on the surface of said first copper oxide superconducting film.

Claim 5 (original): The dielectric waveguide according to claim 1, further comprising: a bonding film formed to bond said first copper oxide superconducting film to other members, and consisting of a silver paste or indium containing an organic substance not containing a glass frit, and a silver powder.

Claim 6 (Currently amended): The dielectric waveguide according to claim 1, further comprising a fixture to fix said first single crystal magnesium oxide block on which said first copper

oxide superconducting film is ~~formed~~ disposed, to other members,

wherein the portion of the fixture that ~~to~~ directly ~~bond~~ bonds to said first copper oxide superconducting film is composed of any one or more kinds among ~~Kovar, Invar~~ Fe-Ni-based alloys with low thermal coefficient, sintered magnesium oxide, stabilized zirconia, partially stabilized zirconia, and polytetrafluoroethylene and ethylene tetrafluoroethylene which are deformable even at 100 K or less.

Claim 7 (Currently amended): The dielectric waveguide according to claim 1, further comprising a pedestal to fix said first single crystal magnesium oxide block on which said first copper oxide superconducting film is ~~formed~~ disposed.

Claim 8 (original): The dielectric waveguide according to claim 7, wherein said first single crystal magnesium oxide block is fixed mechanically on said pedestal.

Claim 9 (Currently amended): The dielectric waveguide according to claim 2, wherein said first and second copper oxide superconducting films are oxide high-temperature superconductor composed of any one kind or more showing the crystal structure anisotropy of ~~Bin1Srn2Can3Cun4On5~~ $Bi_{n1}Sr_{n2}Ca_{n3}Cu_{n4}O_{n5}$ ($1.8 \leq n1 \leq 2.2$, $1.8 \leq n2 \leq 2.2$, $0.9 \leq n3 \leq 1.2$, $1.8 \leq n4 \leq 2.2$, $7.8 \leq n5 \leq 8.4$), ~~Pbk1Bik2Srk3Cak4Cuk5Ok6~~ $Pb_{k1}Bi_{k2}Sr_{k3}Ca_{k4}Cu_{k5}O_{k6}$ ($1.8 \leq k1+k2 \leq 2.2$, $0 \leq k1 \leq 0.6$, $1.8 \leq k3 \leq 2.2$, $1.8 \leq k4 \leq 2.2$, $1.8 \leq k5 \leq 2.2$, $9.5 \leq k6 \leq 10.8$), ~~Ym1Bam2Cum3Om4~~ $Y_{m1}Ba_{m2}Cu_{m3}O_{m4}$ ($0.5 \leq m1 \leq 1.2$, $1.8 \leq m2 \leq 2.2$, $2.5 \leq m3 \leq 3.5$, $6.6 \leq m4 \leq 7.0$),

~~REp1Bap2Cup3Op4~~ $RE_{p1}Ba_{p2}Cu_{p3}O_{p4}$ (RE: consisting of any of La, Nd, Sm, Eu, Gd, Dy, Ho, Er, Tm, Yb, Lu among rare-earth elements, $0.5 \leq m1 \leq 1.2$, $1.8 \leq m2 \leq 2.2$, $2.5 \leq m3 \leq 3.5$, $6.6 \leq m4 \leq 7.0$).

Claim 10 (Currently amended): The dielectric waveguide according to claim 1, further comprising a fixture to fix said first single crystal magnesium oxide block on which said first copper oxide superconducting film is ~~formed~~ disposed, on a pedestal.

Claim 11 (original): The dielectric waveguide according to claim 10, wherein said fixture is made of brass.

Claim 12 (original): The dielectric waveguide according to claim 11, wherein said pedestal is made of brass.

Claim 13 (Currently amended): The dielectric waveguide according to claim 12, wherein said fixture is bonded with indium to said first single crystal magnesium oxide block on which said first copper oxide superconducting film is ~~formed~~ disposed.

Claim 14 (original): The dielectric waveguide according to claim 13, wherein said fixture is fixed mechanically on said pedestal.

Claim 15 (Currently amended): The dielectric waveguide according to claim 6, further comprising a pedestal for fixing said first single crystal magnesium oxide block on which said first copper oxide superconducting film is ~~formed~~ disposed, together with said fixture,

wherein the portion to directly bond to said first copper oxide superconducting film is composed of any one or more kinds among Kovar, Invar, sintered magnesium oxide, stabilized zirconia, partially stabilized zirconia, and polytetrafluoroethylene and ethylene tetrafluoroethylene which are deformable even at 100 K or less.

Claim 16 (original): The dielectric waveguide according to claim 15, wherein said fixture is fixed mechanically on said pedestal.

Claim 17 (Currently amended): The dielectric waveguide according to claim 1, further comprising:

a pedestal to fix said first single crystal magnesium oxide block on which said first copper oxide superconducting film is ~~formed~~ disposed; and

a bonding layer to bond said first copper oxide superconducting film to said pedestal.

Claim 18 (original): The dielectric waveguide according to claim 17, wherein said bonding layer is a silver paste containing a silver powder and an organic substance which does not contain a glass frit.

Claim 19 (original): The dielectric waveguide according to claim 18, wherein said pedestal is a sintered magnesium oxide plate.

Claim 20 (currently amended): A method of production for a dielectric waveguide comprising:

a step of preparing to prepare a first single crystal magnesium oxide block having a surface of face (001), (100) or (010); and

a step of forming to form on said surface a first copper oxide superconducting film in a c-axis crystal orientation perpendicular to four or more faces of said block ~~the surface~~.

Claim 21 (original): The method of production for the dielectric waveguide according to claim 20, wherein said forming step is to form the first copper oxide superconducting film by a sputtering process or a pulse laser deposition process.